



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,060	05/03/2001	Stefan Gruhl	6-1-1-12-39	5563

7590 12/31/2003

Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawford's Corner Road
P.O. Box 3030
Holmdel, NJ 07733-3030

EXAMINER

MOORE JR, MICHAEL J

ART UNIT	PAPER NUMBER
----------	--------------

2666

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/848,060

Applicant(s)

GRUHL ET AL.

Examiner

Michael J Moore, Jr.

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims **1 and 2** are rejected under 35 U.S.C. 102(b) as being anticipated by Yin et al. (U.S. 5,982,748). The Yin et al. reference discloses all of the limitations of the listed claims for the reasoning that follows.

Regarding claim 1, providing a quality of service descriptor for each requesting call is anticipated by the different QoS parameters spoken of in column 1, lines 27-38 of the Yin et al. reference. The meeting of minimum QoS requirements stated in column 3, lines 31-35 of the Yin et al. reference anticipates call acceptance only when the required QoS can be provided. The maintaining of guaranteed QoS to all existing connections stated in column 3, lines 31-35 of the Yin et al. reference anticipates call acceptance only when the required QoS of existing calls is not unacceptably affected.

Regarding claim 2, Table 1 of the Yin et al. reference anticipates a service degradation descriptor that specifies a preferred type of QoS degradation. Table 1 shows QoS parameters such as cell loss ratio, cell transmission delay and cell delay variance (jitter) for varying classes of service. These parameters constitute service degradation descriptors that can specify a level of QoS degradation.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 3, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yin et al. (U.S. 5,982,748) in view of Iwata (U.S. 5,933,425).

Regarding claim 3, Yin et al. discloses a method according to claim 2. Yin et al. does not disclose that the service degradation descriptor specifies acceptable levels of jitter and bit error rate and the order of their importance. However, Iwata discloses user-specified QoS parameters such as transmission delay time, delay time variation (jitter), transmission error rate, and cell loss rate in column 1, lines 14-23. These user-specified QoS parameters constitute service degradation descriptors that specify

Art Unit: 2666

acceptable levels of both jitter (cell delay variation) and bit error rate (transmission error rate) and their order of importance. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to have service degradation descriptors of claim 2 specify acceptable decreases in jitter and bit error rate. A motivation for doing so would be to provide a method for determining an optimum routing path based upon these QoS parameters as stated in column 1, lines 14-23 of Iwata.

Regarding claim 4, Yin et al. discloses a method according to claim 3 where a seamless service descriptor is provided in Table 1. Table 1 shows varying service classes such as ABR, CBR, rt-VBR and nrt-VBR that arrive with each connection request. These service classes constitute seamless service descriptors that specify differing QoS and traffic parameters during cell handovers. Yin et al. does not disclose that the service degradation descriptor of claim 2 specifies acceptable levels of jitter and bit error rate and the order of their importance. However, Iwata discloses user-specified QoS parameters such as transmission delay time, delay time variation (jitter), transmission error rate, and cell loss rate in column 1, lines 14-23. These user-specified QoS parameters constitute service degradation descriptors that specify acceptable levels of both jitter (cell delay variation) and bit error rate (transmission error rate) and their order of importance.

Regarding claim 5, Yin et al. discloses a method according to claim 4 where the seamless service descriptor specifies bandwidth requirements in Table 2. Table 2 shows an example of bandwidth requirements allocated to each service class. Yin et al.

Art Unit: 2666

does not disclose that the service degradation descriptor of claim 2 specifies acceptable levels of jitter and bit error rate and the order of their importance. However, Iwata discloses user-specified QoS parameters such as transmission delay time, delay time variation (jitter), transmission error rate, and cell loss rate in column 1, lines 14-23. These user-specified QoS parameters constitute service degradation descriptors that specify acceptable levels of both jitter (cell delay variation) and bit error rate (transmission error rate) and their order of importance.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yin et al. (U.S. 5,982,748) in view of Gernert et al. (U.S. 6,600,734).

Yin et al. discloses a QoS descriptor that accepts requested calls only when both the requested QoS can be provided and QoS of existing calls is not unacceptably affected. Yin et al. discloses this in column 1, lines 27-38 and in column 3, lines 31-35. Yin et al. also discloses a connection admission controller, a policer unit, and a scheduler in Figure 1. Figure 1 contains connection admission controller 10, rate monitor 16 (policer unit) and queue scheduler 14. Yin et al. also discloses in column 11, lines 51-54 that wireless mobile network implementations may be used. Yin et al. does not disclose a plurality of base stations and a plurality of mobile terminals. However, Gernert et al. discloses a wireless network 100 with base stations 12-14, and mobile terminals 15 in Figure 1. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to combine a wireless network with a plurality of base stations and mobile terminals as shown in Gernert et al. with a connection admission controller, a policer unit, and a scheduler as shown in the

Art Unit: 2666

Yin et al. reference. A motivation for doing so would be to provide connection admission control features to a mobile wireless network.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yin et al. (U.S. 5,982,748) in view of Gernert et al. (U.S. 6,600,734) and in further view of Kim (U.S. 6,215,768).

Yin et al. discloses a QoS descriptor that accepts requested calls only when both the requested QoS can be provided and QoS of existing calls is not unacceptably affected in column 1, lines 27-38 and in column 3, lines 31-35. Yin et al. also discloses a connection admission controller, a policer unit, and a scheduler in Figure 1. Gernert et al. discloses a wireless local area network 100 with wired link 11, base stations 12-14, and mobile terminals 15 in Figure 1. These two references do not disclose that the connection admission controller consists of a connection impact evaluator and a Boolean decision maker. However, Kim discloses a connection admission controller 10 that consists of a comparator 11 and an available bandwidth arithmetic unit 12 in Figure 1. As is stated in column 5, lines 19-28, these two components are used to assess whether the available bandwidth can allow for the call to be connected based upon the current network usage and the call's peak cell rate (PCR). At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to construct the connection admission controller of Yin et al. out of the components of the Kim reference. A motivation for doing so would be to create a system that provides connection admission control as stated in column 5, lines 1-28 of Kim.

Art Unit: 2666

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shah et al. (U.S. 5,862,126), Fijolek et al. (U.S. 6,636,485), Yamano (U.S. 6,636,516), Fichou et al. (U.S. 6,072,773), Sabry et al. (U.S. 6,628,612), Park (U.S. 6,400,685), and Abu-Amara et al. (U.S. 5,883,819) are all references that contain material pertinent to this application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J Moore, Jr. whose telephone number is (703) 305-8703. The examiner can normally be reached during the hours of 8:30am - 5:00pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached at (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Seema S. Rao
SEEMA S. RAO 12/23/03
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

mjm MM